

U.S. National Stage

List of Current Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 - 9 (Cancelled).

10. (New) A pressure sensor, comprising:

a measuring cell having a base plate, a measuring membrane loadable with a pressure to be measured and connected along its edge with said base plate, and at least one means for converting pressure-dependent deformation of said measuring membrane into an electrical quantity;

an electrical circuit for registering said electrical quantity; and

a capsule having a capsule body and a sealing element, with which said capsule is hermetically sealed along a joint, wherein:

said capsule encloses said electrical circuit for protecting such from moisture, and

the joint of said capsule is mechanically decoupled from said base plate.

11. (New) The pressure sensor as claimed in claim 10, wherein:

said base plate of said measuring cell comprises a crystalline or ceramic material, especially corundum.

12. (New) The pressure sensor as claimed in claim 10, wherein:

said at least one means comprise electrodes; and

said electrical quantity is a capacitance between said electrodes, respectively, on said measuring membrane and on said base plate, or a deformation-dependent resistance.

U.S. National Stage

13. (New) The pressure sensor as claimed in claim 10, further comprising:
a housing, in which said measuring cell is axially clamped, wherein:
the axial clamping forces of said measuring cell are not transferred through the
joint of said capsule.
14. (New) The pressure sensor as claimed in claim 10, wherein:
said capsule comprises a ceramic or metal material, especially Kovar.
15. (New) The pressure sensor as claimed in claim 10, wherein:
said capsule is held by electrical connection lines, which extend between said
capsule and said measuring cell.
16. (New) The pressure sensor as claimed in claim 10, wherein:
said capsule and/or the rear face of said base plate have/has at least one
projection, by way of which a defined separation is maintained between the rear face
of said base plate and said capsule.
17. (New) The pressure sensor as claimed in claim 16, wherein:
said at least one projection is engaged in a complementary cavity on said base
plate and/or on said capsule.
18. (New) The pressure sensor as claimed in claim 10, wherein:
sections of surfaces of said measuring cell and said capsule are treated to be
hydrophobic.